

**Pesticide Drift Minimization Meeting Summary**  
**April 9, 2001**

**Meeting Participants:**

**Department of Pesticide Regulation:**

Paul Gosselin, Acting Chief Deputy Director

**Pesticide Enforcement Branch**

Scott Paulsen, Branch Chief

Roy Rutz, Agricultural Program Supervisor III

Nancy Grussing, Supervising Pesticide Use Specialist

Al Lomeli, Supervising Pesticide Use Specialist

Jeanne Martin, Senior Pesticide Evaluation Scientist

Roy Hirose, Senior Pesticide Use Specialist

Mary Ann Coleman, Pesticide Use Specialist

**Environmental Monitoring Branch**

Terri Barry, Senior Environmental Research Scientist

**Pesticide Registration Branch**

Ralph Shields, Supervising Pesticide Use Specialist

**Office of Legislation and Regulations**

Fred Bundock, Program Specialist

**County Agricultural Commissioners:**

Richard Price, Butte County

Mark Lockhart, Lake County

Eric Lauritzen, Monterey County

Kathleen Thuner, San Diego County

**External Stakeholders:**

Richard Ames, California Office of Environmental Health Hazard Assessment

Robert Haas, California Office of Environmental Health Hazard Assessment

Joy Wisniewski, California Office of Environmental Health Hazard Assessment

Terry Gage, California Agricultural Aircraft Association

Gary Del Carlo, California Agricultural Aircraft Association

Ralph Wilkerson, California Agricultural Aircraft Association

Clarence Williams, California Agricultural Aircraft Association

Ray Pojanowski, California Agricultural Aircraft Association

Karen Heisler, U.S. Environmental Protection Agency, Region 9

Henry Buckwalter, Uniroyal

Dale Jones, Jones Flying Service

Anne Katten, California Rural Legal Assistance Foundation

Susan Kegley, Pesticide Action Network

### **External Stakeholders (Continued)**

Cynthia Cory, California Farm Bureau Federation  
Norm Akesson, U.C. Davis, Biological and Agricultural Engineering  
Ken Giles, U.C. Davis, Biological and Agricultural Engineering  
Peggy Barnett, BRC  
Russ Stocker, Bob's Flying Service  
John Jaeger, Consulting  
John Heier, Wilbur Ellis Company  
Kim Crum, California Agricultural Production Consultants Association  
Jeff Phillips, Pesticide Applicators Professional Association  
Tony Clark, Helena

### **Opening Remarks - Paul Gosselin, Acting Chief Deputy Director**

Paul Gosselin explained that the purpose of the meeting was to introduce DPR's Pesticide Drift Initiative and briefly discuss the proposed activities, which are designed to involve our stakeholders.

### **National Coalition on Drift Minimization Update - Karen Heisler - U.S. EPA, Region 9**

Karen Heisler, U.S. Environmental Protection Agency (U.S. EPA), Region 9, provided an overview on the development and purpose of the National Coalition on Drift Minimization (NCODM). NCODM has divided into three subgroups to address educational, technological, and regulatory issues concerning drift. The coalition plans to focus their attention on enhancing pesticide applicator education, application research, and regulatory initiatives to foster reductions in pesticide drift incidents.

NCODM Objectives:

- Assist in development of U. S. EPA's Pesticide Registration (PR) Notice regarding drift.
- Effectively characterize drift and drift assessment.
- Communicate to applicators the importance of risk management.

### **Spray Drift Task Force – Dr. Andrew Hewitt, Project Manager**

#### **(A Brief Background on Dr. Andrew Hewitt, Stewart Agricultural Research Services, Inc.)**

Dr. Andrew Hewitt received his education in the United Kingdom, specializing in the crop protection and environmental science fields. He is currently working in the U.S. as Project Manager for the 38-member Spray Drift Task Force (SDTF). His current research activities include ongoing work with

SDTF; field studies of primary and secondary drift in the U.S., Central America, and Europe; analyzing droplet size spectra, spray performance, and drift potential for various sprayers, nozzles, and drift control adjuvants; AgDrift® and other spray drift modeling work; and other spray application and drift activities. Dr. Hewitt currently chairs a variety of committees and actively participates in worldwide committees, working on buffer zone and drift measurement standards. With his knowledge, experience, and background, Dr. Hewitt is frequently invited to give presentations on spray application, drift measurement, management, modeling, and labeling at various conferences throughout the world. In conjunction with NCODM, he is working on an educational program that will be used to train pesticide applicators in the U.S. for safer spray application and drift management.

Dr. Hewitt has conducted training courses for industry, applicators, and government agencies employing the AgDrift® model in the U.S., Canada, Switzerland, New Zealand, and Australia. He is also working with the U.S. Forest Service on a project to optimize spray applications for drift control, buffers, coverage, and efficacy. As an author of over 80 journal and conference articles on spray application, pesticide drift, and reports submitted to the U.S. EPA, Dr. Hewitt is also a reviewer and editorial board member for several international scientific journals.

### **Highlights of Dr. Hewitt's Drift Presentation:**

#### **SDTF**

- Established in 1990 following U.S. EPA's data call-in on pesticide drift.
- Task force is made up of 39 pesticide manufacturers.
- 2000 pesticide products were affected by U.S. EPA's data call-in. Studies are completed and reports have undergone peer review.

#### **Availability of data:**

- Studies were proprietary to protect data compensation rights of members.

#### **Availability of SDTF Models**

- AgDrift® deposition models will soon be available for download on the Internet in two versions, public and proprietary.
- Drop Kick® atomization model is included with AgDrift® and as stand-alone model.

#### **Variables that can affect drift**

- Droplet size spectrum.
- Spray release position.
- Wind speed and direction.
- Canopy characteristics, especially orchards.

#### **Factors affecting drift**

- Nozzle selection.
- Boom height.

- Wind speed.
- Best management practice factors.

**Study types**

- Aerial field studies (rotary and fixed wing).
- Hydraulic ground rig field studies.
- Orchard airblast field studies (axial fan mist blowers wrap-around).
- Chemigation field studies.
- Extensive atomization and physical property studies at very wide range of nozzles and tank mixes - expands database.
- ASTM - EPA has same definition of drift excluding secondary movements.

**NCODM Resources**

- Video "Straight Talk About Minimizing Drift."
- Education/training on CD-ROM.
- Other videos/resources planned.
- NCDOM training module for applicators.
- Drift education workshops.
- USDA-ARS and FS have models.
- Applicator guide being developed (for aerial applicators) target release summer 2001.

**Managed Stewardship and Application Practices (MSAP) Group**

**John Heier, Market Development Manager, Wilbur Ellis Company**

**(A Brief Background on John Heier, Wilbur Ellis, Inc.)**

John Heier grew up in Live Oak, California on a farm that raised almonds, peaches, prunes, and walnuts. John attended Fresno State University, graduating with a Bachelor of Science in Agriculture Business and a minor in Plant Science. Upon graduation, he worked in retail sales in Fresno, and wholesale for Chevron Chemical Company's Agricultural Chemical Division. John also worked as a wholesale representative and product development representative, followed by international marketing and development for Chevron. Stationed in Paris, France for two-and-a-half years, John was responsible for the development of Chevron chemistry throughout Europe, including the U.S.S.R., and most of Africa. Upon his return to California, he worked for United Ag Products in product development and was an owner/operator of a commercial orchard spray application business.

John's currently works with John Taylor Fertilizer Wilbur Ellis as Market Development Manager. His responsibilities include development of new projects and products that support the agricultural industry. He currently farms walnuts, prunes, small grains, and rice.

**Highlights of Mr. Heier's MSAP Presentation:****Objective**

- To improve crop protection product knowledge and application techniques in order to reduce risk when using crop protection products.

### **Drift Complaints**

- Between 1995 and 1996, pesticide drift was among the top five complaints Wilbur Ellis received from its customers.

### **Goals:**

- Provide data that supports new stewardship and application techniques for specific projects.
- Encourage chemical manufacturers, distributors, dealers, growers, applicators, and agricultural pest control advisers to work together on the correct formulation, packaging, handling, labeling, recommendations, and application of crop protection products.
- Work closer with State, county, university and industry to accomplish MSAP goals.

### **Pesticide Drift Minimization Summary - Roy Rutz, Agricultural Program Supervisor III, Pesticide Enforcement Branch**

- DPR is proposing changes to current drift regulations to include nonrestricted pesticides and to put application standards in one location.
- DPR proposing to change sections:
  - 3CCR section 6000 - Definitions (amended, added, and deleted some definitions).
  - 3CCR section 6460 - Drift Control (repealed).
  - 3CCR section 6466 - Paraquat (repealed).
  - 3CCR section 6540 - Cotton Harvest Aid (some language retained, other language repealed, and other language moved to a different section).
  - 3CCR section 6615 - Drift Minimization - a new section.

### **Meeting Handouts:**

- Pesticide Drift Minimization Meeting Summary - February 2, 2001.
- Suggested Drift Control and Associated Regulations - Table of Contents (Predecisional document, for discussion only - version 4/2/01).
- Pesticide Drift Overview.
- Memo from Precision Applicators – Suggested drift regulations and spray nozzle data sheet.
- A Summary of Aerial Application Studies – SDTF.
- A Summary of Airblast Application Studies – SDTF.
- A Summary of Chemigation Application Studies – SDTF.
- A Summary of Ground Application Studies – SDTF.

**The next meeting will be held in mid- to late-August. The exact time, date, and location will be announced at a later date.**